



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

HT-500-CWA-010P-70A

Job Sheet 189989



Part No: HT-500-CWA-010P-70A

Job Qty: 15 pcs

Part Name: Wash Emblem



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 2/1/19

Job Tracking No:

Due Date: 2/8/19

Created By: Chrisoula Tsimiklis

Type: Stock

Description:

Note: DWG HT-500-CWA Rev. 10 IPP Rev. A 18.05.10 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	15 pcs	2/8/19	2/8/19	0.00	0.00	Purchasing - 1		FEB 05 2019
							Purchasing - 2		
							Purchasing - 3		
110	Packaging 2-1 - Receive - B4B	15 pcs	2/8/19	2/8/19	0.00	0.00	Packaging 2 - 1 - B4B		FEB 05 2019
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		
							Packaging 2 - 28 - B4B		

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com



Container No: S150992



Part: HT-500-CWA-010P-70A

Job No: 189989

Serial No/Batch: S150992

Revision: 10

Inspector:

Exp Date:

Instructions:

Date: 02/05/19

					Packaging 2 - 29 - B4B	
					Packaging 2 - 30 - B4B	
					Packaging 2 - 31 - B4B	
					Packaging 2 - 32 - B4B	
					Packaging 2 - 33 - B4B	
					Packaging 2 - 34 - B4B	
					Packaging 2 - 35 - B4B	
					Packaging 2 - 36 - B4B	
120 QC 6	15 pcs	2/8/19	0.00 0.00		QC 6 - 38	
					QC 6 - 42	
					QC 6 - 9	AD 19-02-12
					QC 6 - 68	
					QC 6 - 61	
130 Packaging 3-1 - Stock - B4B	15 pcs	2/8/19	0.00 0.00		Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	
					Packaging 3 - 4 - B4B	
					Packaging 3 - 5 - B4B	
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	DAS 21 FEB 14 2019
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
140 QC 21 - SA	15 pcs	2/8/19	0.00 0.00		QC 21 - SA - 21	DAS 21 FEB 14 2019
					QC 21 - SA - 70	

Part Op 100 - (Purchasing)1--Issue P/O to Studio Letterage; P/O 042480 2-Fabricate as per DWG.
 Descriptions: 110 - (Receive & Inspect for Damage & Mat'l Certs)
 120 - QC6- All purchased or subcontracted products)
 130 - (Identify as per dwg & Stock Location:_____)
 140 - (QC21- Final Inspection - Work Order Release)

CT x 15

19-02-01

EXP. 2020-02-05

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
HT-500-CWA-010P-70AP	Wash Emblem	15 Ea (1 ea)	100-Purchasing	5150991
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	HT-500-CWA-010P-70AP	15	0	0
Part Specifications				
Specifications could not be found.				

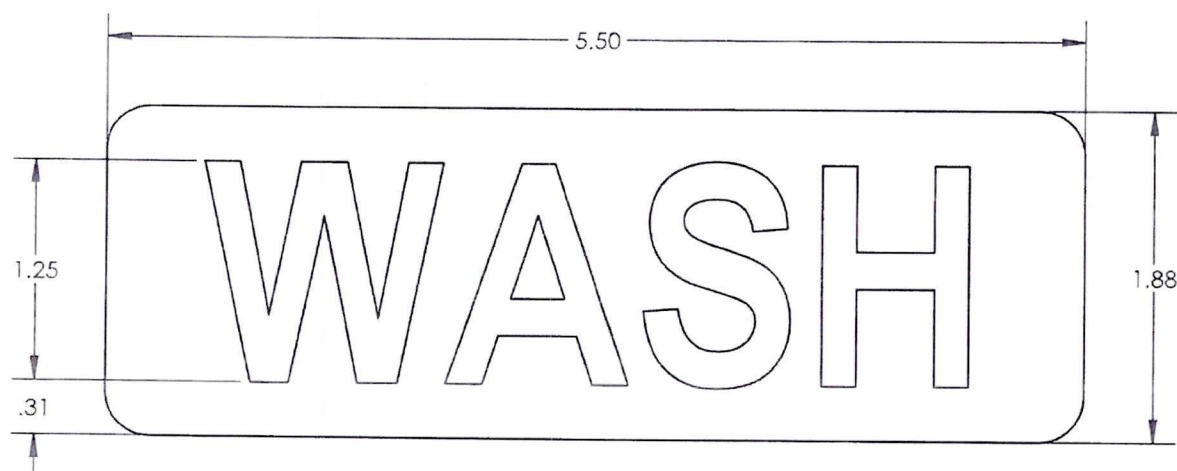
Plex 2/1/19 12:13 PM dart.tsimiklis.chrisoula

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REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
7	14-0131	-010P-70A ADDED DWG.	7/28/14	DJN	RJC
9	16-0205	-010P-70A CH'D DWG TO SHEET METAL TOLERANCE.	11/21/2016	RJC	JAG

SEE ATTACHED DEVIATION

WASH



-010P-70A

WASH EMBLEM

DART AEROSPACE	
TITLE WASH SYSTEM	
DWG NO. HT-500-CWA-010P-70A	REV 10
MAT'L VINYL	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
REAT	.XXX ± .010 FRACTIONS ± 1/8
TREAT	.XX ± .03 ANGLES ± 1°
FINISH	.X ± .1 SURFACES = 125/
SPEC	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
DRAWN BY: NELSON	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
CHECKED: DUERFELDT	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
OPPS APPR: ANDERSON	USED ON MODEL
QA APPR: LINDSAY	
APPROVED: GILBERT	
SCALE 1:1	DATE 7/15/2014 SHEET 26 OF 32



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO042480



Supplier: STU002-VC
Studio de Lettrage 2001
210 Main West
Hawkesbury
ON
K6A 2H6 Canada
Phone: 613 632 5449
Fax: 613 632 9491

Attention: Grace, Batista

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: PO042480

PO Date: 2/1/19

Due Date: 2/5/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Via: Ground

Pymt Terms: Net 30

Freight Terms:

Special Comments: Attn: Pat Lussier

Items

Line Item	Job	Part	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	189989	HT-500-CWA-010P-70AP	DAS 9 9-89		Wash Emblem	Firmed	-	2/5/19	15 Ea	0 Ea	15 Ea	\$6.67/Ea	\$100.05
								15 X FEB 05 2019					
2	189990	HT-500-CWA-010P-70BP			Rinse Emblem	Firmed	-	2/5/19	15 Ea	0 Ea	15 Ea	\$6.67/Ea	\$100.05
								15 X FEB 05 2019					

Line Item Note W/O 177711

Grand Total: \$200.10

Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Plex 2/4/19 2:27 PM dart.Lussier.Patrick



210 Main West
Hawkesbury, Ontario K6A 2H6
Canada

INVOICE

Invoice No.: 47559
Date: 02/05/2019
Ship Date:
Page: 1
Re: Order No.

Sold to:

Dart Aerospace Ltd

1270 Aberdeen
Hawkesbury, Ontario
K6A 1K7

Ship to:

Dart Aerospace Ltd

1270 Aberdeen
Hawkesbury, Ontario
K6A 1K7

Quantity	Description	Base Price	Disc. %	Unit Price	Amount
15	HT-500-CWA-010P-70AP	6.6700	0.05	6.6667	100.00
15	HT-500-CWA-010P-70BP	6.6667		6.6667	100.00
	PO# 042480				
	Attn: Patrick Lussier				
	Subtotal:				200.00
	H - HST				26.00
	HST				
Thank you for your business / Merci de faire affaire avec nous					
Shipped By:		Tracking Number:		HST: 825007651RT0001	
Comment: WO24535				Total Amount	226.00
Sold By:				Amount Paid	0.00
				Amount Owning	226.00

***** CERTIFICATE of CONFORMITY *****

Manufacture:

Studio SL2

Purchase order #:

042480 ✓

Packing Slip#

WO# 24535

Part #:

Drawing Rev:

Serial/Batch:

Description (Part Name): HT-500-CWA-010P-70BP

HT-500-CWA-010P-70BP

Quantity:

15 + 15

Certification:

We hereby certify that:

PLEASE
CHECK
BOX IF
REQUIRED

1. The above listed items were manufactured and/or inspected in accordance with applicable supplied drawings and/or specifications. ☒
2. All work was accomplished in accordance with the Dart Aerospace Ltd. purchase order. ☒
3. Results of all inspections, chemical or physical test, as well as other evidence, which shows the acceptability of raw materials, parts and/or assembly components are on file and available for inspection at any time. ☒
4. All material certification or copies of purchase orders of the material used to manufacture this component have been attached to this document. ☒

Record Expiry Date of Materials: Feb 5, 2020

Authority:

3m

Approval:

Valerie Young

Signature:

Val Y

Date: (yyyy/mm/dd)

2019/02/05

Title:

Office Admin

IJ35-10
IJ35-20**Quick Links**

[3M Graphics Warranties](#)
[Technical Information Selector](#)
[Safety Data Sheets \(SDS\)](#)
[Flammability \(ASTM E84 Reports\)](#)
[Videos](#)

Product Description

- For Solvent, Eco-Solvent UV and Latex Inkjet Printing and Screen Printing
- 3.2-mil vinyl film

Product Features

- Available in gloss and matte finishes
- Pressure-sensitive adhesive
- Permanent
- Expected Performance Life of 5 years (unwarranted period for unprinted film with no graphic protection, applied to a flat, vertical, outdoor surface)

Recommended Types of Graphics and End Uses

- Short to long-term, indoor and outdoor promotional graphics
- Signs, trade show and point-of-purchase displays
- Exhibits and architectural applications

Graphic Protection

Graphic protection can improve the appearance, performance and durability of your graphic. Always use only the graphic protection options recommended in this Bulletin for this film.

- [3M™ Scotchcal™ Gloss Overlamine 8508](#)
- [3M™ Scotchcal™ Luster Overlamine 8509](#)
- [3M™ Scotchcal™ Matte Overlamine 8510](#)

Characteristics

These are typical values for unprocessed product. Processing may change the values.

Physical Characteristics

Characteristic	Value
Material	Vinyl
Film Color	White, opaque
Thickness	Without adhesive: 3.25 mil (0.081 mm) With adhesive: 4.0 mil (0.102 mm)
Adhesive	Pressure sensitive
Adhesive Color	Gray
Liner	Polycoated paper
Flammability	ASTM E84 reports: IJ35-10 and IJ35-20 , or go to the On-line Product Catalog at 3Mgraphics.com

3M™ Scotchcal™ Graphic Film

Application Characteristics

Characteristic	Value
Finished Graphic Application Recommendation	Surface type: Smooth, flat and simple curved surfaces Substrate type: Metal, rigid plastic and painted surfaces Application temperature: 40° – 100°F (4° – 38°C) air and substrate Application method: Dry
Temperature Range After Application	-59 °F to +192 °F (-50 °C to +90 °C) (not for extended periods of time at the extremes)
Graphic Removal	Permanent

Warranty Information

Warranty Coverage Overview

The warranty coverage for eligible graphics is based on the user both reading and following all applicable and current 3M Graphics Product and Instruction Bulletins. The warranty period for eligible graphics is as stated in the 3M Graphics Warranties Matrices at the time that the film was purchased. Information found at 3MGraphics.com/warranties includes:

- [3M Graphics Warranties Bulletin](#)
 - This bulletin contains information on limitations and exceptions, and warranty period reductions for 3M Graphics Warranties. The warranty period may be reduced and stipulations may apply for certain constructions, applications, and graphic exposures as covered in this Bulletin.
- [3M Graphics Warranties Selector](#)
 - Use this selector to search for your vertical warranty period by product type, ink type, film name, and/or ink/prINTER platform.
- [U.S. Desert Southwest Region Map](#)
 - Use this map of hot, arid desert areas to determine if you are subject to reduced warranted durabilities.

The warranties set forth in this Bulletin are made in lieu of all other express or implied warranties, including any implied warranty of merchantability, fitness for a particular purpose, or arising out of a course of dealing, custom, or usage of trade.

3M Basic Product Warranty

3M Graphics Products are warranted to be free of defects in materials and manufacture at the time of shipment and to meet the specifications stated in its applicable 3M Graphics Product Bulletin and as further set forth in the [3M Graphics Warranties Bulletin](#).

Limited Remedy

The limited remedy applicable to each warranty is addressed in the 3M Graphics Warranties Bulletin found at 3MGraphics.com/warranties.

Limitation of Liability

Except where prohibited by law, 3M SHALL NOT UNDER ANY CIRCUMSTANCES BE LIABLE TO PURCHASER OR USER FOR ANY DIRECT (EXCEPT FOR THE LIMITED REMEDY PROVIDED IN THE 3M GRAPHICS WARRANTIES BULLETIN), INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, LABOR, NON-3M MATERIAL CHARGES, LOSS OF PROFITS, REVENUE, BUSINESS, OPPORTUNITY, OR GOODWILL) RESULTING FROM OR IN ANY WAY RELATED TO 3M'S GRAPHICS PRODUCTS, SERVICES, or THIS BULLETIN. This limitation of liability applies regardless of the legal or equitable theory under which such losses or damages are sought.

Additional Limitations

See the 3M Graphics Warranties Bulletin at 3MGraphics.com/warranties, for terms, additional limitations of your warranty, if any, information on reduced warranties for different exposures, and limitations of liability.

Factors that Affect Graphic Performance Life

The actual performance life of a graphic is affected by:

- the combinations of graphics materials used.
- complete ink drying or curing.
- selection, condition and preparation of the substrate.
- surface texture.
- application methods.
- angle and direction of sun exposure.
- environmental conditions.
- cleaning or maintenance methods.

Graphics Manufacturing



CAUTION

Before using any equipment, always read the manufacturer's instructions for safe operation.

Inkjet Printing

Always read and follow the ink manufacturer's written instructions on usage.

- **Sheeted film:** When used on a flat-bed inkjet printer, sheeted film may produce printing defects.
- **Ink limiting:** The recommended maximum ink limit is 250%.
- **If sheeted or stacked graphics will be stored:** If you plan to store sheeted and stacked finished graphics for an extended period of times, leave an unprinted margin (about 1/4 inch) to allow for possible shrinkage before trimming the graphic.

Do not exceed the recommended total ink coverage for the ink series used on this film. Having too high a total physical ink amount on the film results in media characteristic changes, incomplete drying, overlamine lifting, and/or poor graphic performance.

Completely Dry Graphics



IMPORTANT NOTE

Incomplete drying or curing can result in graphic failure including curling, increased shrinkage and adhesion failure, which are not covered under any 3M Graphic Warranty.

See the ink's 3M Product and Instruction Bulletin for more details.

Screen Printing

Formulations and processing conditions can affect ink durability. Refer to the Product and Instruction Bulletins for your ink for limitations and proper usage.

Cutting

See [3M Instruction Bulletin 4.1](#) for Sheeting, Scoring and Film Cutting details.

Graphic Protection

Graphic protection may improve the appearance, performance and durability of the graphic. Click on the graphic protection options listed in Product Bulletin or see the [3M Graphics Market Product Catalog](#), for more information.



IMPORTANT NOTE

During installation, scratches may occur on films without graphic protection.

Application and Installation

In addition to other 3M Bulletins specified in this document, the following Bulletins provide details that you may need to successfully apply a graphic.

- [3M Instruction Bulletin 4.22](#). Hot and Cold Roll Lamination for 3M Overlaminates.
- [3M Instruction Bulletin 5.1](#) Select and Prepare Substrates for Graphic Application
- [3M Instruction Bulletin 5.19](#). Lamination, Application & Maintenance of Floor Graphics. Complete the Surface Preparation procedure found in this Instruction Bulletin prior to applying a graphic to a surface.
- [3M Instruction Bulletin 5.5](#) Application, General Procedures for Interior and Exterior Dry Application
- [3M Instruction Bulletin 6.5](#) Storage, Handling, Maintenance, and Removal of Films and Sheetings

Pressure-sensitive Adhesive

This film has a pressure-sensitive adhesive. It bonds to the surface even with light pressure and cannot be repositioned.

Maintenance and Cleaning

Use a cleaner designed for high-quality painted surfaces. The cleaner must be wet, non-abrasive, without solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline). See [3M Instruction Bulletin 6.5](#) for details.

Shelf Life, Storage and Shipping

Shelf Life

The shelf life is **never more than 2 years** from the date of manufacture on the original box.

If you process the film, the shelf life is changed to **1 year** from the processing date, but not later than the 2 year maximum from the manufacturing date.

Storage Conditions

- 90 °F (32 °C) maximum
- Out of sunlight
- Clean, dry area
- Original container
- Bring the film to print room temperature before using

Shipping Finished Graphics

Flat, or rolled printed side out on 5 inch (13 cm) or larger core. This helps prevent the liner, if used, from popping off.

Health and Safety



CAUTION

When handling any chemical products, read the manufacturer's container labels and the Safety Data Sheets (SDS) for important health, safety and environmental information. To obtain SDS sheets for 3M products go to 3M.com/SDS, or by mail or in case of an emergency, call 1-800-364-3577 or 1-651-737-6501.

When using any equipment, always follow the manufacturer's instructions for safe operation.